



# Adapt to Thrive



## Materials List:

- Boxes/Containers
- Cotton Balls
- Variety of Scents- lemon, lavender, vanilla
- Variety of Textures- LEGOs, rocks, rice

## Cool Facts:

- Your body has different types of receptors that send signals to your nervous system. Some allow you to feel sensations.
- **Troglofauna** are a group of animals who have adapted their bodies to thrive in dark places, like caves. Special adaptations help them find food.

## Instructions:

### Test your sense of smell:

1. Add scents to cotton balls and place them in different boxes.
2. Have the person you're playing with see which of the scents they recognize.
  - a. Since cave sources are meager, the sense organs of troglobites are devoted to finding food. Sense organs and physical adaptations that are beneficial to the animals' survival are enhanced, while those that are not necessary have degenerated.

### Test your sense of touch:

1. Place textured items in different boxes.
  - a. As long as the contents are hidden, you do not need to cover the box.
2. Have the players close their eyes to find out which of the objects they recognize.
  - a. Many troglobites lack pigmentation and good eyesight. Due to the dark environment of caves, adaptations are more helpful for finding food, like a longer antenna and legs.

Compete against others to see what different scents or textures can be identified.

## I Want to Learn More!

- Troglonenes, Trogloniles, Troglobites- how many animals can you name?
- What other adaptations would animals need to develop to survive in the Dark Zone of caves?
- Visit the animal residents living in front of Cincinnati Museum Center's replica limestone cave!

## Additional Resources:

- <https://www.nps.gov/ozar/learn/education/cave-biology.htm>
- <https://cavern.com/Learn/creatures.asp>
- <https://people.uwec.edu/jolhm/Cave/biospe2.htm>